

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 19

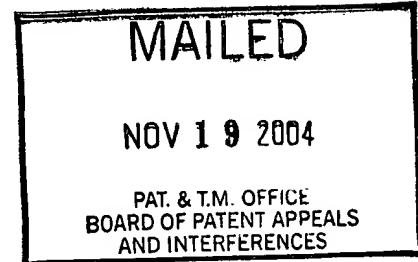
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

**Ex parte** RICHARD E. MARTIN and BRIAN D. STROM

Appeal No. 2004-0478  
Application No. 09/768,976

ON BRIEF



Before BARRY, SAADAT, and MACDONALD, **Administrative Patent Judges**.

MACDONALD, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the final rejection of claims 1-40.

**Invention**

Appellants' invention relates to a disk drive that includes a storage disk, an actuator arm that moves relative to the storage disk, a load beam secured to the actuator arm, a slider positioned near the storage disk, and a head suspension that

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secures the slider to the load beam. The "pitch static attitude" is defined by the free angle formed between the slider and the horizontal when the suspension is held so that the slider is positioned at the normal flying height.

The head suspension maintains the slider at a pitch static attitude of approximately less than zero degrees. More specifically, the head suspension maintains the pitch static attitude at between approximately zero degrees and negative two degrees. When the pitch static angle is negative, a moment acts on the head suspension when the slider rests on the storage disk. The moment inhibits the slider from rotating and tipping in the event the motor cogs or the disk is shocked. By maintaining the pitch static attitude at an angle between negative two and zero degrees, the likelihood of contact between the non-padded portion of the slider and the disk during the start up and shut down phases is minimized. This minimizes the likelihood of drive stiction failure and extends the life of the disk drive.

Appellants' specification at page 3, line 28, through page 4 line 14.

Claim 1 is representative of the claimed invention and is reproduced as follows:

1. A disk drive, comprising:

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a storage disk;

an actuator arm that moves relative to the storage disk;

a load beam secured to the actuator arm;

a slider including a data transducer that exchanges information with the storage disk during data transfer operations; and

a head suspension that secures the slider to the load beam and positions the slider near the storage disk, the head suspension maintaining the slider pitch at a pitch static attitude of less than zero degrees during the data transfer operations, wherein stiction between the slider and the storage disk is substantially less than if the pitch static attitude was greater than zero degrees during the data transfer operations.

#### **References**

The references relied on by the Examiner are as follows:

Jacques	5,612,839	Mar. 18, 1997
Arya et al. (Arya)	5,739,982	Apr. 14, 1998
Battu et al. (Battu)	5,841,610	Nov. 24, 1998

#### ***Rejections At Issue<sup>1</sup>***

Claims 1-3, 5, 8-10, and 12-18, and 20-40 stand rejected under 35 U.S.C. § 102 as being anticipated by Arya.

Claims 4 and 11 stand rejected under 35 U.S.C. § 103 as being obvious over Arya.

Claims 6 and 19 stand rejected under 35 U.S.C. § 103 as being obvious over the combination of Arya and Jacques.

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<sup>1</sup> Appellants have listed as an issue on appeal the Examiner's objection to claims 22 and 34. This is a matter of form and is not appropriate for appeal. See MPEP § 706.01.

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Claim 7 stands rejected under 35 U.S.C. § 103 as being obvious over the combination of Arya and Battu.

Throughout our opinion, we make references to the Appellants' briefs, and to the Examiner's Answer for the respective details thereof.<sup>2</sup>

#### **OPINION**

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of the Appellants and the Examiner, for the reasons stated *infra*, we affirm the Examiner's rejection of claims 1-3, 5, 8-10, 12-18, and 20-29 under 35 U.S.C. § 102; we affirm the Examiner's rejection of claims 4, 6, 7, 11, and 19 under 35 U.S.C. § 103; and we reverse the Examiner's rejection of claims 30-40 under 35 U.S.C. § 102.

Appellants have indicated that for purposes of this appeal, the claims stand or fall together in nineteen groupings:

Claims 1-3, 5, 8-10, and 12-18 as Group I;

Claims 20-23 as Group II;

Claims 24-29 individually as Groups III-VIII;

Claim 30 as Group IX;

Claims 31-34 as Group X;

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<sup>2</sup>Appellants filed an appeal brief on May 22, 2003. The Examiner mailed out an Examiner's Answer on July 1, 2003.

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Claims 35-40 individually as Groups XI-XVI;

Claims 4 and 11 as Group XVII;

Claims 6 and 19 as Group XVIII; and

Claim 7 as Group XIX.

See page 5 of the brief. 37 CFR § 1.192 (c)(7) (July 1, 2002) as amended at 62 Fed. Reg. 53169 (October 10, 1997), which was controlling at the time of Appellants' filing of the brief.

37 CFR § 1.192 (c)(7) states:

*Grouping of claims.* For each ground of rejection which appellant contests and which applies to a group of two or more claims, the Board shall select a single claim from the group and shall decide the appeal as to the ground of rejection on the basis of that claim alone unless a statement is included that the claims of the group do not stand or fall together and, in the argument under paragraph (c)(8) of this section, appellant explains why the claims of the group are believed to be separately patentable. ***Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable.*** (Emphasis added)

We will therefore consider Appellants' claims as standing or falling together in the nineteen groups noted above, and we will treat:

Claim 1 as a representative claim of Group I;

Claim 20 as a representative claim of Group II;

Claim 31 as a representative claim of Group X;

Claim 4 as a representative claim of Group XVII; and

Claim 6 as a representative claim of Group XVIII.

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If the brief fails to meet either requirement, the Board is free to select a single claim from each group and to decide the appeal of that rejection based solely on the selected representative claim. ***In re McDaniel***, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002). ***See also In re Watts***, 354 F.3d 1362, 1368, 69 USPQ2d 1453, 1457 (Fed. Cir. 2004).

***I. Whether the Rejection of Claims 1-3, 5, 8-10, and 12-18 Under 35 U.S.C. § 102 is proper?***

It is our view, after consideration of the record before us, that the disclosure of Arya does fully meet the invention as recited in claims 1-3, 5, 8-10, and 12-18. Accordingly, we affirm.

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. ***See In re King***, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and ***Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.***, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984).

With respect to independent claim 1, Appellants argue at page 7 of the brief, that the Examiner's assertion that Arya et al. shows stiction "is clearly erroneous" and that "Table 1 says nothing about stiction." We agree. However, Appellants' argument alone is not sufficient to overcome the Examiner's ***prima***

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**facie** showing of anticipation. In the situation before us, Appellants bear the burden to produce evidence showing that the prior art apparatus does not possess the claimed properties ascribed to Appellants' structurally identical or obvious apparatus. See **MPEP § 2112.01 (I)**:

Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a **prima facie** case of either anticipation or obviousness has been established. **In re Best**, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." **In re Spada**, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the **prima facie** case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. **In re Best**, 562 F.2d at 1255, 195 USPQ at 433. **See also Titanium Metals Corp. v. Banner**, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

We find that the Examiner therefore correctly found that Arya established a **prima facie** case of anticipation. At that point, the burden shifted to Appellants to show that the prior art structure did not inherently possess the functionally defined limitations of the claimed apparatus. **In re Schreiber**, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997). Because Appellants have failed to demonstrate that the functional characteristics of the claimed invention are not inherent in the

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structure disclosed by Arya, we affirm the rejection of the claims under 35 U.S.C. § 102.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

***II. Whether the Rejection of Claims 20-23 Under 35 U.S.C. § 102 is proper?***

It is our view, after consideration of the record before us, that the disclosure of Arya does fully meet the invention as recited in claims 20-23. Accordingly, we affirm.

With respect to independent claim 20, Appellants argue at page 8 of the brief, that "Arya et al. says nothing about the amount of stiction." We find that Appellants' argument does not overcome the Examiner's ***prima facie*** showing of anticipation as discussed above with respect to claim 1.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

***III. Whether the Rejection of Claim 24 Under 35 U.S.C. § 102 is proper?***

It is our view, after consideration of the record before us, that the disclosure of Arya does fully meet the invention as recited in claim 24. Accordingly, we affirm.

With respect to dependent claim 24, Appellants argue at pages 8-9 of the brief, that "Arya et al. says nothing about the amount of stiction." Appellants also cite to ***MPEP § 2131.01*** to show

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that the Examiner must provide extrinsic evidence to show that Arya possesses Appellants' claimed property. Appellants are in error. This section covers the general case for example where an inherent structural component of the apparatus is not shown in the reference. In the appeal before us, we have an identical or substantially identical structure in the prior art reference. For this specific situation the claimed properties or functions are presumed to be inherent and the burden shifts to the Appellants to show otherwise. See **MPEP § 2112.01 (I)**, as discussed above with respect to claim 1. We find that Appellants' argument does not overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claim 1.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

**IV. Whether the Rejection of Claim 25 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does fully meet the invention as recited in claim 25. Accordingly, we affirm.

With respect to dependent claim 25, Appellants argue at page 9 of the brief by referring back to their arguments with respect to claim 24. We find that Appellants' argument does not overcome

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the Examiner's ***prima facie*** showing of anticipation as discussed above with respect to claims 1 and 24.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

**V. Whether the Rejection of Claim 26 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does fully meet the invention as recited in claim 26. Accordingly, we affirm.

With respect to dependent claim 26, Appellants argue at page 10 of the brief by referring back to their arguments with respect to claim 24. We find that Appellants' argument does not overcome the Examiner's ***prima facie*** showing of anticipation as discussed above with respect to claims 1 and 24.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

**VI. Whether the Rejection of Claim 27 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does fully meet the invention as recited in claim 27. Accordingly, we affirm.

With respect to dependent claim 27, Appellants at pages 10-11 of the brief repeat the arguments they made with respect to

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claims 1 and 24. We find that Appellants' arguments do not overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 1 and 24.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

**VII. Whether the Rejection of Claim 28 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does fully meet the invention as recited in claim 28. Accordingly, we affirm.

With respect to dependent claim 28, Appellants argue at page 11 of the brief by referring back to their arguments with respect to claim 27. We find that Appellants' argument does not overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 1 and 24.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

**VIII. Whether the Rejection of Claim 29 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does fully meet the invention as recited in claim 29. Accordingly, we affirm.

With respect to dependent claim 29, Appellants argue at pages 11-12 of the brief by referring back to their arguments with respect to claim 27. We find that Appellants' argument does not overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 1 and 24.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

**IX. Whether the Rejection of Claim 30 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does not fully meet the invention as recited in claim 30. Accordingly, we reverse.

With respect to dependent claim 30, Appellants argue at page 12 of the brief by referring back to their arguments with respect to claim 20. We find that this argument does not overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 1 and 24.

Appellants also argue that Arya fails to teach "slider 48 including a pad that contacts disk 138." The Examiner rebuts this at pages 7-8 of the answer by pointing out that the Jacques patent teaches this feature and the rejection based on Arya in view of Jacques is proper. We have fully reviewed the record before us and can find no rejection of claim 30 based on the

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combination of Arya and Jacques. We only find a rejection based on Arya alone and we find that Arya fails to teach the claimed feature of "a pad that extends below the air bearing surface."

Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 102.

It should be noted that our decision does not preclude the Examiner from rejecting this claim based on a combination of Arya and Jacques should the Examiner deem such a rejection to be appropriate.

**X. Whether the Rejection of Claims 31-34 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does not fully meet the invention as recited in claims 31-34. Accordingly, we reverse.

With respect to independent claim 31, Appellants argue at page 12 of the brief by referring back to their arguments with respect to claim 20. We find that this argument does not overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 1 and 24.

Appellants also argue that Arya fails to teach "a plurality of pads, wherein . . . the pads contact the storage disk." The Examiner rebuts this at pages 7-8 of the answer by pointing out that the Jacques patent teaches this feature and the rejection

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based on Arya in view of Jacques is proper. We have fully reviewed the record before us and can find no rejection of claim 31 based on the combination of Arya and Jacques. We only find a rejection based on Arya alone and we find that Arya fails to teach the claimed feature of "a plurality of pads, . . . and the pads contact the storage disk."

Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 102.

It should be noted that our decision does not preclude the Examiner from rejecting this claim based on a combination of Arya and Jacques should the Examiner deem such a rejection to be appropriate.

**XI. Whether the Rejection of Claim 35 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does not fully meet the invention as recited in claim 35. Accordingly, we reverse.

With respect to dependent claim 35, Appellants argue at pages 12-13 of the brief by referring back to their arguments with respect to claim 31. We find that Appellants' argument does overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 31.

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Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 102.

**XII. Whether the Rejection of Claim 36 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does not fully meet the invention as recited in claim 36. Accordingly, we reverse.

With respect to dependent claim 36, Appellants argue at page 13 of the brief by referring back to their arguments with respect to claim 31. We find that Appellants' argument does overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 31.

Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 102.

**XIII. Whether the Rejection of Claim 37 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does not fully meet the invention as recited in claim 37. Accordingly, we reverse.

With respect to dependent claim 37, Appellants argue at page 13 of the brief by referring back to their arguments with respect to claim 31. We find that Appellants' argument does overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 31.

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Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 102.

**XIV. Whether the Rejection of Claim 38 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does not fully meet the invention as recited in claim 38. Accordingly, we reverse.

With respect to dependent claim 38, Appellants argue at pages 13-14 of the brief by referring back to their arguments with respect to claim 31. We find that Appellants' argument does overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 31.

Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 102.

**XV. Whether the Rejection of Claim 39 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does not fully meet the invention as recited in claim 39. Accordingly, we reverse.

With respect to dependent claim 39, Appellants argue at page 14 of the brief by referring back to their arguments with respect to claim 31. We find that Appellants' argument does overcome the

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Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 31.

Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 102.

**XVI. Whether the Rejection of Claim 40 Under 35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Arya does not fully meet the invention as recited in claim 40. Accordingly, we reverse.

With respect to dependent claim 40, Appellants argue at page 14 of the brief by referring back to their arguments with respect to claim 31. We find that Appellants' argument does overcome the Examiner's **prima facie** showing of anticipation as discussed above with respect to claims 31.

Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 102.

**XVII. Whether the Rejection of Claims 4 and 11 Under 35 U.S.C. § 103 is proper?**

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the invention as set forth in claims 4 and 11. Accordingly, we affirm.

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In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a **prima facie** case of obviousness. **In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). **See also In re Piasecki**, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. **In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants. **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. **See also Piasecki**, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and argument." **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." **In re Lee**, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

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With respect to dependent claim 4, Appellants argue at page 15 of the brief solely by referring back to their argument with respect to claim 1. We find that Appellants' argument does not overcome the Examiner's ***prima facie*** showing of obviousness for the reasons discussed above with respect to claims 1.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 103 for the same reasons as set forth above.

***XVIII. Whether the Rejection of Claims 6 and 19 Under 35 U.S.C. § 103 is proper?***

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the invention as set forth in claims 6 and 19. Accordingly, we affirm.

With respect to dependent claim 6, Appellants argue at page 15 of the brief solely by referring back to their argument with respect to claim 1. We find that Appellants' argument does not overcome the Examiner's ***prima facie*** showing of obviousness for the reasons discussed above with respect to claims 1.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 103 for the same reasons as set forth above.

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**XIX. Whether the Rejection of Claim 7 Under 35 U.S.C. § 103 is proper?**

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the invention as set forth in claim 7. Accordingly, we affirm.

With respect to dependent claim 7, Appellants argue at page 15 of the brief solely by referring back to their argument with respect to claim 1. We find that Appellants' argument does not overcome the Examiner's **prima facie** showing of obviousness for the reasons discussed above with respect to claims 1.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 103 for the same reasons as set forth above.

**Conclusion**

In view of the foregoing discussion, we have sustained the rejection under 35 U.S.C. § 102 of claims 1-3, 5, 8-10, 12-19, and 20-29; we have sustained the rejection under 35 U.S.C. § 103 of claims 4, 6, 7, 11, and 19; and we have not sustained the rejection under 35 U.S.C. § 102 of claims 30-40.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED-IN-PART**

LANCE LEONARD BARRY  
Administrative Patent Judge

MAHSHID SAADAT  
Administrative Patent Judge

ALLEN R. MACDONALD  
Administrative Patent Judge

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